

#Exercise 1-1\

### **Supervised learning\**

When previous examples are taken into account and data is distinguished based upon it. (*Comparisons!*)

### **Unsupervised learning\**

When data is distinguished without previously known examples.

##Association rule mining:\

**In which grade different sets of data supports each other**

##Clustering:\

**Putting information together in clusters**

##Outlier detection\

**Detection of rare coincidences that are different from majority of data**

##Classification\

**Assigning different pieces of data to different classes. e.g putting a mail into spam or non-spam.**

(a) Optical character recognition/OCR:\

*unsupervised learning*, classification

(b) Computer Aided Diagnosis:\

*supervised learning*, classification

(c) Cheat Detection:\

*supervised learning*, Outlier detection

(d) Recommendation systems:\

*supervised learning* Association rule mining

(e) News Aggregation:\

*unsupervised*, Clustering